REMARKS

Claims 1-9 are pending in this application. Claim 1 was amended in this response to improve form, and the amendment was in no way related to issues of patentability. Claim 7 was also amended in this response. No new matter has been introduced as a result of the amendments.

Claims 1-4 and 6 were rejected under 35 U.S.C. §102(b) as being anticipated by *Budnik* (US Patent 6,043,707). Claim 7 was rejected under 35 U.S.C. §102(e) as being anticipated by *Khanifar et al.* (US Patent App. US2004/0100323). Claims 7-9 were rejected under 35 U.S.C. §102(e) as being anticipated by *O'Flaherty et al.* (US Patent 6,703,897). Claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Budnik* (US Patent 6,043,707). Applicant traverses these rejections. Favorable reconsideration is respectfully requested.

Specifically, none of the cited art, alone or in combination disclose "compensating for any nonlinearity of the transmission amplifier via a predistortion unit for data values in an input data stream, wherein the supply voltage is reduced to an extent to which a quality factor for the compensation for the nonlinearity of the transmission amplifier is increased by the predistortion unit" as recited in claim 1, and similarly recited in claim 7. The present application teaches that the power amplifier is usually operated in a non-linear mode in order to reduce power emission from the power supply. Claim 1 reflects this feature by reciting that the power transmission amplifier is operated in a non-linear mode if the quality of the digital predistortion is acceptable. If the operation of the transmission amplifier initiates or has been influenced by a change in the operating parameters, the transmission amplifier is operated in a linear mode. Accordingly, it follows that a quality factor for the compensation of the non-linearity of the trans-mission amplifier is monitored throughout, and if the quality is acceptable, the operation mode of the amplifier is non-linear. The linear mode is preferred in cases in which the digital pre-distortion does not work well due to external influences in connection with its time constant to compensate for non-linear behaviour of the transmission amplifier.

In contrast, *Budnik* discloses three operation modes for the transmission amplifier (col. 6, line 66 – col. 7, line 38). The first mode of operation is where the envelope amplitudes as

determined by the envelope detectors 31, 32 are low. In this case, the amplifier is operating in a "traditional linear mode with constant supply voltage". During intermediate envelope amplitudes, a "linear mode of operation (such as class AB)" is chosen to operate the transmission amplifier (col. 7, lines 10-23). Only if high power levels occur the transmission amplifier is put "into a non-linear class of operation (such as class C)" (col. 7, lines 25-37). Accordingly, the transmission amplifier disclosed in *Budnik* only operates in a non-linear mode only when high power input signals are detected. The digital predistortion in *Budnik* are disclosed as changing between low and intermediate envelope amplitudes on one side and high envelope amplitudes on the other side (see FIG. 6 and associated text). Thus, *Budnik* only monitors the power level of the input signals to be transmitted and amplified by the transmission amplifier and not the quality of pre-distortion. The present claims teach that as soon as the quality of the compensation for non-linearity is sufficient, the operation mode of the transmission amplifier is altered from linear to non-linear mode. Accordingly, applicants submit that the rejections under 35 U.S.C. §102(b) and 103(a) are improper and should be withdrawn.

In light of the amendments to claim 7 and the arguments provided above, Applicants submit that *O'Flaherty* does not disclose the features recited in the claim. Accordingly, the rejection under 35 U.S.C. §102(e) is improper and should be withdrawn.

With regard to the *Khanifar* reference, the Applicants wish to point out that the present application claims priority to European Patent Application 02015954.7 which has a priority date of July 17, 2002. Since this date predates the earliest filing date for *Khanifar*, it is submitted that the reference does not qualify as prior art and should thus be removed from consideration.

Accordingly, Applicants respectfully submit that the patent application is in condition for allowance and request a Notice of Allowance be issued. A Petition for a one-month extension of time is enclosed herein, along with a check in the amount of $120.00. The Commissioner is authorized to charge and credit Deposit Account No. 02-1818 for any fees associated with the submission of this Response, including any time extension fees. Please reference docket number 112740-846.

Respectfully submitted,
BELL, BOYD & LLOYD LLC

BY _____

Peter Zura
Reg. No. 48,196
P.O. Box 1135
Chicago, Illinois 60690-1135
Phone: (312) 807-4208

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